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Simulating the birth environment of circumstellar discs

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Propositions accompanying the thesis

Simulating the birth environment of circumstellar discs

1. The viscous expansion of circumstellar discs can override the effects of dynamical truncations (*Chapter 2*)
2. External photoevaporation results in mass loss that is at least one order of magnitude larger than that of dynamical truncations (*Chapter 3*)
3. Planet formation must start within the first 0.1 Myr of disk evolution for disks to be massive enough to form planets (*Chapters 3, 4*)
4. Studying the evolution of dust mass is necessary for constraining the time scales for planet formation (*Chapter 5*)
5. The location and time at which stars and discs form is crucial for determining their potential to form planets (*Chapter 5*)
6. External photoevaporation is a much more relevant process for disc mass loss than dynamical encounters
7. Planet formation must start very early on in the lifetime of a disc
8. The effects of interstellar gas cannot be discounted when studying the lifetime of circumstellar discs
9. The disc dispersal process is extremely complex and requires careful modeling of several mechanisms
10. Software portability should be a priority when developing scientific code
11. Good programming practices, algorithmic thinking, and use of version control software should be taught at undergraduate level in all disciplines involving at least some coding
12. Taking time off is essential for having a functional brain during actual work hours

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